

Docket No.: YOR920000621US1

AFTER FINAL

This Amendment After Final Rejection is submitted in response to the outstanding final Office Action, dated January 26, 2005. Claims 1 through 23 are presently pending in the above-identified patent application. In this response, applicant proposes to amend claims 1, 12, and 15. No additional fee is due.

5 This amendment is submitted pursuant to 37 CFR §1.116 and should be entered. The Amendment places all of the pending claims, i.e., claims 1 through 23, in a form that is believed allowable, and, in any event, in a better form for appeal. It is believed that examination of the pending claims as amended, which are consistent with the previous record herein, will not place any substantial burden on the Examiner.

10 In the Office Action, the Examiner rejected claims 1-5 and 7-17 under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter. The Examiner also rejected claims 1-11 and 15-23 under 35 U.S.C. §103(a) as being unpatentable over Adams et al. (United States Patent Number 5,274,561) in view of Deitel & Deitel, "C++ How to Program," Prentice-Hall, Inc., 1998, (hereinafter Deitel),  
15 and rejected claims 12-14 under 35 U.S.C. §103(a) as being unpatentable over Adams et al. in view of Deitel and Raymond J. Barber, Jr., "Does Your Accounting Make Cents?," National Association of Cost Accounting, 1947, and Applicant's declaration.

Section 101 Rejections

20 Claims 1-5 and 7-17 were rejected under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter. In particular, the Examiner asserts that claims 1-5 and 7-17 have no connection to the technological arts and none of the steps indicate any connection to a computer or technology.

25 Claims 1, 12, and 15 have been amended to emphasize that the claimed methods are computer-based. Applicant submits that each of the claims 1-23 are in full compliance with 35 U.S.C. §101, and accordingly, respectfully requests that the rejection under 35 U.S.C. §101 be withdrawn.

Independent Claims 1, 12, 15, 18, and 23

Independent claims 1, 15, 18, and 23 were rejected under 35 U.S.C. §103(a) as being unpatentable over Adams et al. in view of Deitel and independent claim  
30 12 was rejected under 35 U.S.C. §103(a) as being unpatentable over Adams et al. in view

Docket No.: YOR920000621US1

of Deitel, Barber, Jr., and Applicant's declaration. Regarding claim 1, the Examiner acknowledges that Adams, "explicitly, does not disclose generating a random number, and rounding said purchase price up or down to a whole-unit amount based on said random number," but asserts that Deitel discloses these features to "generate sequence of  
5 number repeatedly and round off the number to the nearest value to avoid floating numbers for ease of calculation, practicality, and understanding." Regarding claim 12, the Examiner acknowledges that Adams, "explicitly, does not disclose generating a random number, and rounding said purchase price up to a price of  $N+1$  units with a probability of  $p$  and down to a price of  $N$  units with a probability of  $(1-p)$ , wherein  
10 probability  $p$  equals  $C/100$  and wherein said step of generating a random number is performed in a manner that prevents a bias towards a buyer or seller."

Applicant notes that Adams is directed to rounding-off a taxi fare to include, for instance, a tip or gratuity (col. 1, lines 50-59). Thus, the prior art is directed to rounding-off a fare for the purpose of including a tip and the present invention is  
15 directed to rounding-off a purchase price to an amount that makes the transaction easier to execute. (The basis used for rounding-off the purchase price is critical to the proper operation of the invention, and it is critical in the present invention that the client (purchaser) does *not* choose the amount of the round-off, as the amount of the round-off must be fair to both the purchaser and seller.) Thus, Adams *teaches away* from the  
20 present invention by teaching that the amount of the round-off (the tip) is determined by the client. A person of ordinary skill in the art would therefore not look to combine Adams and Deitel.

In addition, Applicants could find no teaching by Deitel of rounding up or down a fractional transaction cost to a whole-unit amount based on a generated random  
25 number or probability that ensures fairness to both buyers and sellers, over time.

Regarding claim 12, the Examiner asserts that "Applicant admits that rounding said purchase price up to a price of  $N+1$  units with a probability of  $p$  and down to a price of  $N$  units with a probability of  $(1-p)$ , wherein the probability  $p$  equals  $C/100$  is prior art." Contrary to the Examiner's assertion, Applicants only noted that, for a discrete  
30 random variable  $Z$  taking the value  $Z_1$  with probability  $q$  and  $Z_2$  with probability  $1-q$ , and denoting the expected value of  $Z$  by  $E(Z)$ , then the prior art teaches that:

Docket No.: YOR920000621US1

$$E(Z) = p Z_1 + (1-p) Z_2$$

Applicant did not state or suggest that rounding the purchase price based on a random number or a probability to create a fair transaction price is disclosed or suggested by the prior art.

5 Barber, Jr. was also cited by the Examiner in the rejection of claim 12 for its disclosure of "rounding purchase price to N+1 and N (nearest dollar)." Applicant notes that Barber is directed to a discussion of the value of converting currency amounts to the nearest dollar in the practice of accounting. Barber does not address the issue of rounding a purchase price based on a random number or probability p.

10 Independent claims 1, 18, and 23 require rounding said purchase price up or down to a whole-unit amount *based on said random number*, independent claim 12 requires rounding said purchase price up to a price of N+1 units with a *probability of p* and down to a price of N units with a probability of (1-p), *wherein probability p equals C/100*, and independent claim 15 requires rounding said purchase price up to a price of X  
15 units with a *probability of ((N + p) / X)* and down to a price of zero units with a probability of  $1 - ((N + p) / X)$ , *wherein probability p equals C/100*.

Thus, Adams et al., Deitel, Barber, Jr., and Applicant's declaration, alone or in combination, do not disclose or suggest rounding said purchase price up or down to a whole-unit amount based on said random number, as required by independent claims 1,  
20 18, and 23, do not disclose or suggest rounding said purchase price up to a price of N+1 units with a probability of p and down to a price of N units with a probability of (1-p), wherein probability p equals C/100, as required by independent claim 12, and do not disclose or suggest rounding said purchase price up to a price of X units with a probability of  $((N + p) / X)$  and down to a price of zero units with a probability of  $1 - ((N + p) / X)$ , wherein probability p equals C/100, as required by independent claim 15.  
25

Dependent Claims 2-11, 13-14, 16-17 and 19-22

Dependent claims 2-11, 16-17, and 19-22 were rejected under 35 U.S.C. §103(a) as being unpatentable over Adams et al. in view of Deitel, and claims 13-14 were rejected under 35 U.S.C. §103(a) as being unpatentable over Adams et al. in view of  
30 Deitel, Barber, Jr., and Applicant's declaration.